

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,583	12/22/2000	Robert D. Sirois	03-DV-7050	2674
7:	590 10/29/2002			
Armstrong Teasdale LLP			EXAMINER	
Suite 2600 One Metropolitan Sq.			LAM, THANH	
St. Louis, MO	63102	•	ART UNIT	PAPER NUMBER
			2834	
			DATE MAILED: 10/29/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

09/748,583

Applicant(s)

Sirois

Office Action Summary

Examiner

Thanh Lam

Art Unit 2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on *Aug 16, 2002* 2a) This action is **FINAL**. 2b) X This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. Disposition of Claims 4) X Claim(s) 1-21 is/are pending in the application. 4a) Of the above, claim(s) 1-7 is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) X Claim(s) 8-21 is/are rejected. 7) Claim(s) is/are objected to. are subject to restriction and/or election requirement. 8) Claims Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some* c) □ None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) The translation of the foreign language provisional application has been received. 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § \$ 120 and/or 121. Attachment(s) 1) X Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s).

Application/Control Number: 09748583 Page 2

Art Unit: 2834

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).
- 2. Claims 8-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Asano et al. (pn. 6,218,753).

Regarding claim 8, Asano et al.disclose an electric motor comprising: a housing (40); a stator (20) comprising a stator core (21), said stator at least partially within said housing, said stator core comprising a plurality of generally planar laminas, each lamina having an axis, each

Page 3

Application/Control Number: 09748583

Art Unit: 2834

said lamina comprising a plurality of notches (marked in red ink in fig. 2) and a plurality of interlock tabs (marked in red ink in fig. 2), the notches extending outward from the interlock tabs to an outside diameter (marked in red ink in fig. 2) of said laminas; and a rotor having a rotor (10) core and disposed at least partially within said stator.

Regarding claim 9, Asano et al. disclose said rotor is disposed coaxially within said stator.

Regarding claim 10, Asano et al. disclose said interlock tabs have an oblong shape, an inside edge, an outside edge, and a pair of semi-circular edges.

Regarding claim 11, Asano et al. disclose said each said lamina includes at least two interlocking tabs.

Regarding claim 12, Asano et al. disclose each said lamina of said stator core stacked on top of an adjacent lamina to form a stack of laminas, said stack of lamina further comprising a first lamina, a plurality of interior laminas, and a last lamina, said plurality of interior laminas arranged in between said first and said last lamina, said each lamina having at least a plurality of interlock tabs, said plurality of interlock tabs received by each adjacent lamina to enhance the engagement between said laminas.

Regarding claim 13, Asano et al. disclose said first lamina and said last lamina further comprising an upper surface and a lower surface, said upper surface substantially parallel to said lower surface, said first lamina's upper surface and said last lamina's lower surface substantially parallel to each other and substantially flat.

Application/Control Number: 09748583 Page 4

Art Unit: 2834

Regarding claim 14, Asano et al. disclose an electric motor comprising: a housing; a stator comprising a stator core, said stator at least partially within said housing, said stator core comprising a plurality of generally planar laminas, each lamina having an axis, each said lamina comprising a plurality of interlock tabs, the plurality of interlock tabs extending outward to an outside diameter of said laminas; and a rotor having a rotor core and disposed at least partially within said stator.

Regarding claim 15, Asano et al. disclose a stator core comprising a plurality of generally planar laminas, each said lamina having a plurality of notches with a first axis of symmetry and a plurality of interlock tabs with a second axis of symmetry, the notches extending from the interlock tabs to an outside diameter of said laminas.

Regarding claim 16, Asano et al. disclose said first axis of symmetry and said second axis of symmetry of coincide.

Regarding claim 17, Asano et al. disclose said first axis of 'symmetry and said second axis of symmetry do not coincide.

Regarding claim 18, Asano et al. disclose said first axis of symmetry is positioned at an angle a with respect to said second axis of symmetry.

Regarding claim 19, Asano et al. disclose said interlock tabs have oblong shape, an inside edge, an outside edge, and a pair of semi-circular edges.

Regarding claim 20, Asano et al. disclose the interlock tabs includes a third axis of symmetry, said third axis of symmetry perpendicular to said first and said second axis of

Application/Control Number: 09748583

Page 5

Art Unit: 2834

symmetry, said first axis of symmetry further located a pre-determined distance from said second

axis of symmetry.

Regarding claim 21, Asano et al. disclose a stator core comprising a plurality of generally

planar laminas, each said lamina having a plurality of interlock tabs with an axis of symmetry,

the interlock tabs extending to an outside diameter of said laminas.

Response to Arguments

3. Applicant's arguments with respect to claims 8-21 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Thanh Lam whose telephone number is (703) 308-7626. The fax phone

number for this Group is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Group receptionist whose telephone number is (703) 308-0656.

Thanh Lam

Patent Examiner

U.S. Patent

Apr. 17, 2001

Sheet 2 of 19

US 6,218,753 B1

FIG. 2

